CIVIL AIM CONSULTANTS & ENGINEERS
(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company
NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

Job No.: CACE/BBMP/KTR/W.No.14 /2021-22

Date: 03.06.2022

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Client	: Assistant Executive Engineer,Dasarahalli Sub division, BBMP, Bangalore.
Agency	:M/s K T R Constructions(Prop.K.T.Ravi), Contractor, Mysore.
Name of the work	:Improvements to roads and drains near Magnum School Surrounding and Other area in Bagalagunte ward no.14, BBMP, Bangalore.
Sample ID	: Cement Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{30}
Compressive Strength as on	: 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	06.05.2022	03.06.2022	8.165	708.2	31.48
2	06.05.2022	03.06.2022	8.138	716.2	31.83
3	06.05.2022	03.06.2022	8.146	700.9	31.15

Note:

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Authorised Signatory

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Date: 13.05.2022

Job No.: CACE/BBMP/KTR/W.No.14 /2021-22

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Client	: Assistant Executive Engineer,Dasarahalli Sub division, BBMP, Bangalore.
Agency	:M/s K T R Constructions(Prop.K.T.Ravi), Contractor, Mysore.
Name of the work	:Improvements to roads and drains near Magnum School Surrounding and Other area in Bagalagunte ward no.14, BBMP, Bangalore.
Sample ID	: Cement Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{30}
Compressive Strength as on	: 7th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	06.05.2022	13.05.2022	8.180	515.2	22.90
2	06.05.2022	13.05.2022	8.169	526.3	23.39
3	06.05.2022	13.05.2022	8.154	508.1	22.58

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For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

No. 01, Satvika Nilaya, Opp. Widia Poorna Prajna School,
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Job No.: CACE/BBMP/KTR/W.No.14 /2021-22

Date: 03.06.2022

TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Client : **Assistant Executive Engineer,Dasarahalli Sub division, BBMP, Bangalore.**

Agency : **M/s K T R Constructions(Prop.K.T.Ravi), Contractor, Mysore.**

Name of the work : Improvements to roads and drains near Magnum School Surrounding and Other area in Bagalagunte ward no.14, BBMP, Bangalore.

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{30}

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	06.05.2022	03.06.2022	8.157	708.5	31.49
2	06.05.2022	03.06.2022	8.163	716.3	31.84
3	06.05.2022	03.06.2022	8.152	724.8	32.21

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Date : 21.04.2022

Job No.: CACE/BBMP/KTR/W.No.14 /2021-22

GRADATION FOR WMM

Client : **Assistant Executive Engineer ,Dasarahalli Sub division, BBMP, Bangalore.**

Agency : **M/s KTR Constructions(Prop,Sri.K.T.Ravi), Contractor, Mysore.**

Name of Work : Improvements to roads and drains near Magnum School Surrounding and Other area in Bagalagunte ward no.14, BBMP, Bangalore.

IS Code: : IS 2386 (Part 1):1963(RA 2011)

Date of Testing : 21.04.2022

Material Type : Wet Mix Macadam

Oven Dry.Wt, gran 10000

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Requirement as per MORTH 5th edition table no 400.13
53	0	0	0	100	100
45	172	172	1.7	98.3	95-100
22.4	2545	2717	27.2	72.8	60-80
11.2	2281	4998	50.0	50.0	40-60
4.75	1881	6879	68.8	31.2	25-40
2.36	1239	8118	81.2	18.8	15-30
0.600	641	8759	87.6	12.4	8-22
0.075	1092	9851	98.5	1.5	0-5

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Job No.: CACE/BBMP/KTR/W.No.14 /2021-22 Date : 21.04.2022

GRADATION FOR WMM

Client : **Assistant Executive Engineer ,Dasarahalli Sub division, BBMP, Bangalore.**

Agency : **M/s KTR Constructions(Prop,Sri.K.T.Ravi), Contractor, Mysore.**

Name of Work : Improvements to roads and drains near Magnum School Surrounding and Other area in Bagalagunte ward no.14, BBMP, Bangalore.

IS Code: : IS 2386 (Part 1):1963(RA 2011)

Date of Testing : 21.04.2022

Material Type : Wet Mix Macadam

Oven Dry.Wt, gran 10000

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Requirement as per MORTH 5th edition table no 400.13
53	0	0	0	100	100
45	183	183	1.8	98.2	95-100
22.4	2463	2646	26.5	73.5	60-80
11.2	2179	4825	48.3	51.8	40-60
4.75	1835	6660	66.6	33.4	25-40
2.36	1156	7816	78.2	21.8	15-30
0.600	639	8455	84.6	15.5	8-22
0.075	1239	9694	96.9	3.1	0-5

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Date : 21.04.2022

Job No.: CACE/BBMP/KTR/W.No.14 /2021-22

GRADATION FOR WMM

Client : **Assistant Executive Engineer ,Dasarahalli Sub division, BBMP, Bangalore.**
Agency : **M/s KTR Constructions(Prop,Sri.K.T.Ravi), Contractor, Mysore.**
Name of Work : Improvements to roads and drains near Magnum School Surrounding and Other area in Bagalagunte ward no.14, BBMP, Bangalore.
IS Code: : IS 2386 (Part 1):1963(RA 2011)
Date of Testing : 21.04.2022
Material Type : Wet Mix Macadam

Oven Dry.Wt, gran 10000

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Requirement as per MORTH 5th edition table no 400.13
53	0	0	0	100	100
45	197	197	2.0	98.0	95-100
22.4	2456	2653	26.5	73.5	60-80
11.2	2205	4858	48.6	51.4	40-60
4.75	1875	6733	67.3	32.7	25-40
2.36	614	7347	73.5	26.5	15-30
0.600	1195	8542	85.4	14.6	8-22
0.075	1135	9677	96.8	3.2	0-5

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Job No.: CACE/BBMP/KTR/W.No.14 /2021-22

Date : 21.04.2022

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	**Assistant Executive Engineer ,Dasarahalli Sub division, BBMP, Bangalore.**
Agency	**M/s KTR Constructions(Prop.Sri.K.T.Ravi), Contractor, Mysore.**
Name of Work	Improvements to roads and drains near Magnum School Surrounding and Other area in Bagalagunte ward no.14, BBMP, Bangalore.
BIS code:	IS 2386(Part 1) 1963 (RA 2011)
Type of Mix	Wet Mix Macadam
Date of Testing	21.04.2022

Sl no	**Test**	**1**	**2**	**Requirements as per MORTH 5th edition table no 400.12**
1	Flakiness Index %	12.40	12.10	Combined Flakiness & Elongation index Max 35%
2	Elongation Index %	12.70	12.50	
	Combined Flakiness & Elongation index	25.10	24.60	

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Date : 21.04.2022

Job No.: CACE/BBMP/KTR/W.No.14 /2021-22

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	Assistant Executive Engineer ,Dasarahalli Sub division, BBMP, Bangalore.
Agency	M/s KTR Constructions(Prop.Sri.K.T.Ravi), Contractor, Mysore.
Name of Work	Improvements to roads and drains near Magnum School Surrounding and Other area in Bagalagunte ward no.14, BBMP, Bangalore.
BIS code:	IS 2386(Part 1) 1963 (RA 2011)
Type of Mix	Wet Mix Macadam
Date of Testing	21.04.2022

Sl no	Test	1	2	Requirements as per MORTH 5th edition table no 400.12
1	Flakiness Index %	12.50	12.60	Combined Flakiness & Elongation index Max 35%
2	Elongation Index %	12.90	13.10	
	Combined Flakiness & Elongation index	25.40	25.70	

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Job No.: CACE/BBMP/KTR/W.No.14 /2021-22

Date: 21.04.2022

Aggregate Impact Value

Client	**Assistant Executive Engineer ,Dasarahalli Sub division, BBMP, Bangalore.**
Agency	**M/s K T R Constructions(Prop.K.T.Ravi), Contractor, Mysore.**
Name of the Work	Improvements to roads and drains near Magnum School Surrounding and Other area in Bagalagunte ward no.14, BBMP, Bangalore.
IS Code	IS 2386 (Part 4):1963(RA 2011)
Type of Mix	Wet Mix macadam
Date of Testing	21.04.2022

Sl No.	Details	Test No. 1	Test No. 2	Average
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	383	382.5	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	84.5	82	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	298.5	300.5	
4	Aggregate Impact value = percent fines 100* (W_2/W_1)%	22.06	21.44	**21.75**

Comments:

→ Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%(As per MORTH Specication table 400.12)

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Job No.: CACE/BBMP/KTR/W.No.14 /2021-22 Date: 21.04.2022

Aggregate Impact Value

Client	**Assistant Executive Engineer ,Dasarahalli Sub division, BBMP, Bangalore.**
Agency	**M/s K T R Constructions(Prop.K.T.Ravi), Contractor, Mysore.**
Name of the Work	Improvements to roads and drains near Magnum School Surrounding and Other area in Bagalagunte ward no.14, BBMP, Bangalore.
IS Code	IS 2386 (Part 4):1963(RA 2011)
Type of Mix	Wet Mix macadam
Date of Testing	21.04.2022

Sl No.	Details	Test No. 1	Test No. 2	Average
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	387	389	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	85.5	86.5	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	301.5	302.5	
4	Aggregate Impact value = percent fines 100* (W_2/W_1)%	22.09	22.24	22.16

Comments:

→ Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%(As per MORTH Specication table 400.12)

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Job No.: CACE/BBMP/KTR/W.No.14 /2021-22

Date : 21.04.2022

ATTERBERG LIMITS TEST FOR WMM

Client : **Assistant Executive Engineer , Dasarahalli Sub division, BBMP, Bangalore.**

Agency : **M/s KTR Constructions(Prop,Sri.K.T.Ravi), Contractor, Mysore.**

Name of Work :Improvements to roads and drains near Magnum School Surrounding and Other area in Bagalagunte ward no.14, BBMP, Bangalore.

IS Code: : IS 2720(Part 5):1985

Date of Testing : 19.04.2022 to 21.04.2022

Material Type : Wet Mix Macadam

Sl. No.	Particulars	Test Results	Requirement as per MORTH 5th edition Cl.406.2.1.2
1	Liquid Limit	23.00	-
2	Plasticity Index, %	Non Plastic	6.0% Maximum.

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Date : 21.04.2022

Job No.: CACE/BBMP/KTR/W.No.14 /2021-22

ATTERBERG LIMITS TEST FOR WMM

Client : Assistant Executive Engineer , Dasarahalli Sub division, BBMP, Bangalore.

Agency : M/s KTR Constructions(Prop,Sri.K.T.Ravi), Contractor, Mysore.

Name of Work :Improvements to roads and drains near Magnum School Surrounding and Other area in Bagalagunte ward no.14, BBMP, Bangalore.

IS Code: : IS 2720(Part 5):1985

Date of Testing : 19.04.2022 to 21.04.2022

Material Type : Wet Mix Macadam

Sl. No.	Particulars	Test Results	Requirement as per MORTH 5th edition Cl.406.2.1.2
1	Liquid Limit	21.50	-
2	Plasticity Index, %	Non Plastic	6.0% Maximum.

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Job No.: CACE/BBMP/KTR/W.No.14 /2021-22 Date : 21.04.2022

ATTERBERG LIMITS TEST FOR WMM

Client	: Assistant Executive Engineer , Dasarahalli Sub division, BBMP, Bangalore.
Agency	: M/s KTR Constructions(Prop,Sri.K.T.Ravi), Contractor, Mysore.
Name of Work	:Improvements to roads and drains near Magnum School Surrounding and Other area in Bagalagunte ward no.14, BBMP, Bangalore.
IS Code:	: IS 2720(Part 5):1985
Date of Testing	: 19.04.2022 to 21.04.2022
Material Type	: Wet Mix Macadam

Sl. No.	Particulars	Test Results	Requirement as per MORTH 5th edition Cl.406.2.1.2
1	Liquid Limit	22.00	-
2	Plasticity Index, %	Non Plastic	6.0% Maximum.

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JobNo: CACE/BBMP/KTR/W.No.14 /2021-22

Date : 23.05.2022

TEST RESULTS OF AGGREGATE IMPACT VALUE

Client : **Assistant Executive Engineer ,Dasarahalli Sub division, BBMP, Bangalore.**

Agency : **M/s K T R Constructions(Prop.K.T.Ravi), Contractor, Mysore.**

Name of work :Improvements to roads and drains near Magnum School Surrounding and Other area in Bagalagunte ward no.14, BBMP, Bangalore.

Source / Location : Hot Mix Plant, Bangalore

BIS Code : IS 2386 Part (4):1963

Type of Mix : Dense Graded Bituminous Macadam

Date of test : 23.05.2022

Sl No.	Details	Trial No. 1	Trial No. 2	Average
1	Total weight of aggregate sample filling the cylindrical measure = W1 g	379	385	
2	Weight of agregate passing 2.36 mm sieve after the test = W2 g	85	83	
3	Weight of aggregate retained 2.36 mm sieve after the test = W3 g	295	302	
5	Aggregate Impact value = percent fines 100* (W2/W1) percent	22.30	21.56	**21.93**

Comments:

→ Maximum allowable Aggregate Impact value for Dense Graded Bituminous Macadam is 27% (Table 500-8 of MORTH specification)

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JobNo: CACE/BBMP/KTR/W.No.14 /2021-22 Date : 23.05.2022

TEST RESULTS OF AGGREGATE SHAPE TEST
(Flakiness & Elongation)

Client : Assistant Executive Engineer ,Dasarahalli Sub division, BBMP, Bangalore.

Agency : M/s K T R Constructions(Prop.K.T.Ravi), Contractor, Mysore.

Name of work :Improvements to roads and drains near Magnum School Surrounding and Other area in Bagalagunte ward no.14, BBMP, Bangalore.

BIS Code : IS 2386 Part (1):1963

Date of Test : 23.05.2022

Type of Mix : Dense Graded Bituminous Macadam

Sl.No.	Flakiness Index Value(%)	Elongation Index Value(%)	Total(Combined Flakiness and Elongation)(%)	Requirements
1	12.50	13.10	25.60	Maximum allowable Combined Flakiness and Elongation Indices for Dense Graded Bituminous Macadam is 35% as per Table 500.8 MORTH Specification.
2	12.80	13.50	26.30	

Note:

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For CIVIL AIM CONSULTANTS & ENGINEERS

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Job No.: CACE/BBMP/KTR/W.No.14 /2021-22 Date: 23.05.2022

Aggregate Gradation Test

Client	: Assistant Executive Engineer ,Dasarahalli Sub division, BBMP, Bangalore.
Agency	: M/s K T R Constructions(Prop.K.T.Ravi), Contractor, Mysore.
Name of the Work	:Improvements to roads and drains near Magnum School Surrounding and Other area in Bagalagunte ward no.14, BBMP, Bangalore.
BIS Code	IS 2386(Part 1):1963(RA 2011)
Sample I / D	Hot mix Plant, Bangalore.
Type of Mix	Dense Graded Bituminous Macadam
Date of Testing	23.05.2022

Total Weight of Sample: **10000** gm

SIEVE SIZE, mm	Weight Retained, gm	% Retained	Cummulative % Retained	% Passing	Requirement as per MORTH table 500.10	Remarks
37.50	0	0.0	0	100	100	Gradation satisfies Grade-II MORTH specification
26.50	517	5.2	5.17	94.83	90 - 100	
19.00	1349	13.5	18.66	81.34	71 - 95	
13.20	1383	13.8	32.49	67.51	56 - 80	
4.75	2451	24.5	57.00	43.00	38 - 54	
2.36	1192	11.9	68.92	31.08	28 - 42	
0.300	1352	13.5	82.44	17.56	7 - 21	
0.075	1229	12.3	94.73	5.27	2 - 8	

Total Weight of Sample: **10000** gm

SIEVE SIZE, mm	Weight Retained, gm	% Retained	Cummulative % Retained	% Passing	Requirement as per MORTH table 500.10	Remarks
37.5	0	0.0	0	100	100	Gradation satisfies Grade-II MORTH specification
26.5	742	7.4	7.42	92.58	90 - 100	
19	1463	14.6	22.05	77.95	71 - 95	
13.2	1271	12.7	34.76	65.24	56 - 80	
4.75	2429	24.3	59.05	40.95	38 - 54	
2.360	1215	12.2	71.20	28.80	28 - 42	
0.300	1321	13.2	84.41	15.59	7 - 21	
0.075	1189	11.9	96.30	3.70	2 - 8	

Note:

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For CIVIL AIM CONSULTANTS & ENGINEERS

Authorised Signatory

No. 01, Satvika Nilaya, Opp. Widia Poorna Prajna School,
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Job No: CACE/BBMP/KTR/W.No.14 /2021-22 Date: 23.05.2022

TEST REPORT ON PAVING BITUMEN

Client	**Assistant Executive Engineer,Dasarahalli Sub division, BBMP, Bangalore.**
Agency	**M/s K T R Constructions(Prop.K.T.Ravi),** Contractor, Mysore.
Name of work	Improvements to roads and drains near Magnum School Surrounding and Other area in Bagalagunte ward no.14, BBMP, Bangalore.
BIS Code	IS 73:2013,IS 1203:1978, IS 1208:1978, IS 1205:1978, IS1448(P-69):1969
Date of Testing	23.05.2022
Type of Mix	**Dense Graded Bituminous Macadam , VG 30**
Source of Location	**Hot Mix Plant**

The results of the tests conducted on the bitumen sample using for Dense Graded Bituminous Macadam

Sl.No	Description	Test Result	Requirement as per IS:73:2013
1	Penetration at 25 0C, 100gms, 5sec, 1/10 mm	62	Min 45
2	Softening point, 0C	53	Min 47
3	Ductility at 250C, cm	>107	Min40
4	Flash Point, 0C	269	Min 220

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Date: 25.05.2022

Job No.: CACE/BBMP/KTR/W.No.14 /2021-22

Specific Gravity And Water Absorption Test

Client	: Assistant Executive Engineer ,Dasarahalli Sub division, BBMP, Bangalore.
Agency	: M/s K T R Constructions(Prop.K.T.Ravi), Contractor, Mysore.
Name of the Work	:Improvements to roads and drains near Magnum School Surrounding and Other area in Bagalagunte ward no.14, BBMP, Bangalore.
BIS Code	IS 2386(Part 3):1963
Type of Mix	Dense Graded Bituminous Macadam
Date of Testing	23.05.2022 to 25.05.2022

Sl. No.	Details	Notation	Test Number			Mean Value
			Test 1	Test 2	Test 3	
1	Weight of aggregate suspended in water with the basket	W_1 g	2020	2023	2025	
2	Weight of basket suspended in water	W_2 g	756	759	761	
3	Weight of saturated aggregate in water	$(W_1 - W_2) = W_s$ g	1264	1264	1264	
4	Weight of saturated surface dry aggregate in air	W_3 g	2015	2017	2018	
5	Weight of water equal to the volume of the aggregate	$(W_3 - W_S)$ g	751	753	754	
6	Weight of oven dried aggregate	W_4 g	2007	2007	2005	
7	Specific Gravity	$W_4/(W_3-W_S)$	2.672	2.665	2.659	2.666
8	Apparent Specific gravity	$W_4/(W_4-W_S)$	2.701	2.701	2.706	2.703
9	Water Absorption	$((W_3-W_4)*100)/W_4$	0.40%	0.50%	0.65%	0.52%

Comments:

→ Maximum allowable Aggregate Water absorption value for Dense Graded Bituminous Macadam is 2.0%(As per MORTH table 500.8)

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Job No.: CACE/BBMP/KTR/W.No.14 /2021-22 Date: 01.06.2022

TEST REPORT ON STABILITY OF MIX

Client	:	**Assistant Executive Engineer,Dasarahalli Sub division, BBMP, Bangalore.**
Agency	:	**M/s K T R Constructions(Prop.K.T.Ravi),** Contractor, Mysore.
Name of the Work	:	Improvements to roads and drains near Magnum School Surrounding and Other area in Bagalagunte ward no.14, BBMP, Bangalore.
Type of Mix	:	Dense Graded Bituminous Macadam
Date of Testing	:	01.06.2022

The results of the tests conducted on the Dense Graded Bituminous Macadam mix sample are as follows:

Sl. No	Description	Test Result 1	Test Result 2	Requirement as per MORTH (Table 500-19)
1	Marshal Stability, Kn	10.29	9.71	9 Kn (min)
2	Marshal flow, mm	3.78	2.75	2 – 4
3	Percent air voids in Mineral Aggregate	14.42	13.12	13 – 15
4	Voids in Compacted Mix	4.65	3.39	3 – 6
5	Percent Voids filled with Bitumen	72.15	69.58	65 - 75
6	Density, g/cc	2.23	2.22	--

Note:

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For CIVIL AIM CONSULTANTS & ENGINEERS

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Job No.: CACE/BBMP/KTR/W.No.14 /2021-22

Date: 01.06.2022

BITUMEN CONTENT AND GRADATION DETERMINATION OF DENSE GRADED BITUMINOUS MACADAM MIX

AASHTO T 164 & AASHTO T 30

Client	: Assistant Executive Engineer ,Dasarahalli Sub division, BBMP, Bangalore.
Agency	: M/s K T R Constructions(Prop.K.T.Ravi), Contractor, Mysore.
Name of the Work	:Improvements to roads and drains near Magnum School Surrounding and Other area in Bagalagunte ward no.14, BBMP, Bangalore.
Date of Testing	01.06.2022

BITUMEN CONTENT DETERMINATION

Description	Test 1	Test 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	477	476.5
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	23.00	23.50
7. Bitumen content in %	4.60	4.70
8. Average	4.65	

GRADATION AFTER EXTRACTION

SIEVE SIZE	Test 1				Requirement as per MORTH table 500.10
mm	Weight Retained, gm	Cummulative Weight Retained	%Cummulative Retained	% Passing	
37.5	0	0	0	100	100
26.5	38.7	38.7	8.1	91.9	90 - 100
19	77.5	116.2	24.4	75.6	71 - 95
13.2	59.5	175.7	36.8	63.2	56 - 80
4.75	80.8	256.5	53.8	46.2	38 - 54
2.360	70.7	327.2	68.6	31.4	28 - 42
0.300	94.3	421.5	88.4	11.6	7 - 21
0.075	22.9	444.4	93.2	6.8	2 - 8

SIEVE SIZE	Test 2				Requirement as per MORTH table 500.10
mm	Weight Retained, gm	Cummulative Weight Retained	%Cummulative Retained	% Passing	
37.5	0	0	0	100	100
26.5	36.5	36.5	7.7	92.3	90 - 100
19	73.4	109.9	23.1	76.9	71 - 95
13.2	66.8	176.7	37.1	62.9	56 - 80
4.75	84.50	261.2	54.8	45.2	38 - 54
2.360	78.6	339.8	71.3	28.7	28 - 42
0.300	98.5	438.3	92.0	8.0	7 - 21
0.075	23.4	461.7	96.9	3.1	2 - 8

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Job No.: CACE/BBMP/KTR/W.No.14 /2021-22

Date: 20.06.2022

Aggregate Impact Value

Client	: Assistant Executive Engineer ,Dasarahalli Sub division, BBMP, Bangalore.
Agency	: M/s K T R Constructions(Prop.K.T.Ravi), Contractor, Mysore.
Name of the Work	Improvements to roads and drains near Magnum School Surrounding and Other area in Bagalagunte ward no.14, BBMP, Bangalore.
BIS Code	IS 2386(Part 4):1963
Source / Location	Hot Mix Plant, Bangalore
Type of Mix	Bituminous Concrete
Date of Testing	20.06.2022

Sl No.	Details	Test No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	382	385	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	83	85.5	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	299	299.5	
4	Aggregate Impact value = percent fines 100* (W_2/W_1) percent	21.73	22.21	21.97

Comments:

→ Maximum allowable Aggregate Impact value for Bituminous Concrete is 24%(MORTH table no.500.16)

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